# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/755,814 | 01/05/2001 | Brian Gerard Goodman | TUC920000052US1 | 5411 |

| 24033          7590          12/21/2004 | EXAMINER |
|---|---|
| KONRAD RAYNES & VICTOR, LLP<br>315 S. BEVERLY DRIVE<br># 210<br>BEVERLY HILLS, CA  90212 | YANCHUS III, PAUL B |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2116 | |

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
| :---: | :--- | :--- |
| **Office Action Summary** | 09/755,814 | GOODMAN ET AL. |
| | Examiner | Art Unit |
| | Paul B Yanchus | 2116 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on _29 September 2004_.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) _1-69_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) _11-16,28-33,45-50,55,59 and 63_ is/are allowed.
6) ☒ Claim(s) _1-10, 18-28, 35-45, 51-54, 56-58, 60-62 and 64-69_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All    b) ☐ Some *   c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

This non-final office action is in response to communications filed on 9/29/04.

## *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 18-28, 35-45, 51-54, 56-58, 60-62 and 64-69 are rejected under 35

U.S.C. 102(e) as being anticipated by Huh et al., US Patent no. 6,584,559 [Huh][1].

Regarding claims 1, 18 and 35, Huh discloses a method of selecting a code image during

a reboot routine, comprising:

maintaining multiple code images in a memory device [old firmware and new firmware,

column 3, lines 34-40];

executing a first operation routine [initiating of boot sequence when new firmware is

present, column 4, lines 24-30];

incrementing a first counter if the first operation routine succeeds [increment counter

when new firmware is present and not validated, column 4, lines 24-30 and 39-43];

executing a second operation routine [determine if system is up and running, column 4,

line 64 – column 5, line 3];

incrementing a second counter if the second operation routine succeeds [setting

validation flag to VALID if system is up and running, column 4, line 64 – column 5, line 10];

and

using the first and second counters to select one of the code images from the memory

device to execute [old firmware is executed if counter has reached a predetermined threshold and

new firmware is not set to VALID, column 4, lines 44-51].

Regarding claims 2, 3, 19, 20, 36 and 37, Huh discloses setting the new firmware to

INVALIDATED and executing the old firmware when the counter reaches a predetermined

threshold and the validation flag is not set to VALID [column 4, lines 44-51].

Regarding claims 4, 6, 21, 23, 38 and 40, Huh discloses determining if the new firmware

is corrupted and retrying a download of the new firmware if the new firmware is corrupted

[column 4, lines 14-19].

Regarding claims 5, 22 and 39, Huh discloses executing the old (or latest) version of

firmware when the new firmware is invalidated [column 4, line 45-54]. Once the new firmware

is validated (neither old firmware nor new firmware are non-operational) it is executed instead of

the old firmware. When the method is repeated for a second new firmware the previous new

firmware becomes the old (or latest) version of firmware and is executed in the event that the

second new firmware is invalidated. Therefore, the earliest version of firmware is replaced by

the previous new firmware when the second new firmware is downloaded.

Regarding claims 7, 24 and 41, Huh discloses that the first operation routine is a reboot

routine [column 4, lines 24-26] and the second operation is an initialization routine [executing

---

[1] included in office action mailed on 12/4/03.

firmware and determining whether system is up and running, column 4, line 65 – column 5, line 10].

Regarding claims 8, 25 and 42 Huh discloses incrementing the second counter if the initialization routine successfully completed, rebooting if the initialization routine failed and performing another iteration of all previous steps after rebooting [column 4, line 65 – column 5, line 10 and Figure 3].

Regarding claims 9, 26 and 43, Huh discloses selecting one copy of the code image, wherein the executed initialization routine is a component of the selected code image, wherein the selected code image is designated as non-operational if the first counter is the first value and the second counter is the second value and selecting one other copy of the code image if the selected code image is designated as non-operational [old firmware is executed if counter has reached a predetermined threshold and new firmware is not set to VALID, column 4, lines 44-51].

Regarding claims 10, 27 and 44, Huh discloses that the old firmware and new firmware are different versions [column 5, lines 58-61].

Regarding claim 51, Huh states that the second operation routine determines if the system is up and running [column 4, line 65 – column 5, line 3].

Regarding claims 52, 56 and 60, Huh discloses that executing the first and second operation routines and incrementing the first and second counters are performed during a reboot operation [column 4, lines 24-26]] and that the code images include implementations of the first and second counters [old firmware can include the boot code, column 5, lines 58-60].

Regarding claims 53, 57 and 61, Huh discloses that the firmware can be updated [column 4, lines 29-30].

Regarding claims 54, 58, 62 and 64-66, Huh discloses that the initialization routine executes firmware and determines whether the system is up and running [column 4, line 65 – column 5, line 10]. Variables and parameters are inherently initialized when firmware is executed to boot a system.

Regarding claims 67-69, Huh states old firmware can include the boot code, which selects a version of firmware to execute [column 5, lines 58-60 and Figure 3].

## *Allowable Subject Matter*

Claims 11-16, 28-33, 45-50, 55, 59 and 63 are allowed.

## *Response to Arguments*

Applicant's arguments with respect to claims 1-10, 17-27, 34-44, 51-54, 56-58 and 60-62 have been considered but are moot in view of the new ground(s) of rejection.

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul B Yanchus whose telephone number is (571) 272-3678. The examiner can normally be reached on Mon-Thurs 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lynne H Browne can be reached on (571) 272-3670. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600 2/00

Paul Yanchus
December 14, 2004